AMENDMENTS TO THE CLAIMS

1. (currently amended) A process for obtaining porous propylene polymers optionally containing up to 10% by mol of derived units of ~~one or more alpha-olefins~~at least one alpha-olefin of formula CH_2=CHZ wherein Z is H or a C_2-C_{10} alkyl radical, comprising the step of polymerizing, in a polymerization medium, propylene and optionally said ~~one or more alpha-olefins~~at least one alpha-olefin, under polymerization conditions, in the presence of a catalyst system comprising at least a metallocene compound~~, said process being characterized in that~~ wherein:
   a) the catalyst system is supported on an organic porous polymer; and
   b) at least part of the polymerization reaction is carried out in the presence of hydrogen.
2. (currently amended) The process according to claim 1 ~~being further characterized in that~~wherein the polymerization medium is liquid propylene optionally containing minor amounts of an inert hydrocarbon solvent or ~~of one or more~~at least one comonomer of formula CH_2=CHZ.
3. (currently amended) A process for obtaining a porous propylene polymer optionally containing up to 10% by mol of derived units of ~~one or more alpha-olefins~~at least one alpha-olefin of formula CH_2=CHZ wherein Z is H or a C_2-C_{10} alkyl radical, comprising the following steps:
   a) prepolymerizing in a first polymerization medium propylene optionally with ~~one or more alpha-olefins~~at least one alpha-olefin of formula CH_2=CHZ wherein Z is H or a C_2-C_{10} alkyl radical in the presence of a catalyst system supported on an organic porous polymer, said catalyst comprising a metallocene compound; wherein the first polymerization medium is liquid propylene; and
   b) contacting propylene and optionally ~~one or more alpha-olefins~~at least one alpha-olefin of formula CH_2=CHZ wherein Z is H or a C_2-C_{10} alkyl radical under polymerization conditions in the presence of hydrogen and the

prepolymerized catalyst system obtained in step a), in a second polymerization medium.

4. (currently amended) The process according to claim 3 wherein the second polymerization medium ~~in step b)~~ is liquid propylene optionally containing minor amounts of an inert hydrocarbon solvent or ~~of one or more~~at least one comonomer of formula CH_2=CHZ.

5. (currently amended) The process according to ~~anyone of claims 1 to 4~~claim 1 wherein the organic porous polymer has porosity due to pores with diameter up 10 μm (100000 Å) higher than 0.1 cc/g.

6. (currently amended) The process according to ~~anyone of claims 1 to 5~~claim 1 wherein in the organic porous polymer ~~the~~a total porosity due to ~~of~~ all pores whose diameter is comprised between 0.1 μm (1000 Å) and 2 μm (20000 Å) is at least 30% of ~~the~~a total porosity due to of all pores whose diameter is comprised between 0.02 μm (200 Å) and 10 μm (100000 Å).

7. (currently amended) The process according to ~~anyone of claims 1 to 6~~claim 1 wherein ~~the~~an amount of hydrogen present during the polymerization reaction is more than 1 ppm.

8. (currently amended) The process according to ~~anyone of claims 1 to 7~~claim 1 wherein the catalyst system containing ~~a~~the metallocene compound is ~~obtainable~~obtained by reacting:
   a) ~~a~~the metallocene compound;
   b) at least an alumoxane or a compound ~~able to form~~that forms an alkylmetallocene cation; and
   c) optionally an organo aluminum compound.

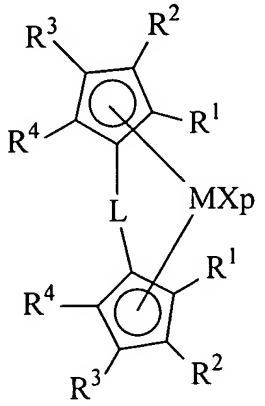
9. (currently amended) The process according to claim 8 wherein the catalyst system is supported on an organic porous polymeric support according to a process comprising the following steps:
   (a) preparing a catalyst solution comprising ~~a~~the catalyst system and a solvent;
   (b) introducing into a contacting vessel:
      (i) a porous support material in particle form having a total pore volume, and

(ii) a first volume of the catalyst solution not greater than the total pore volume of the porous support material introduced;

(c) discharging the material resulting from step (b) from the contacting vessel and suspending it in an inert gas flow, under such conditions that the solvent evaporates; and

(d) reintroducing at least part of the material resulting from step (c) into the contacting vessel together with ~~another~~a second volume of the catalyst solution not greater than the total pore volume of the reintroduced material.

10. (currently amended) The process according to ~~anyone of claims 1 to 9~~claim 1 wherein the metallocene compounds belong to formula (I):



(I)

wherein

M is a transition metal belonging to group 4, 5 or to the lanthanide or actinide groups of the Periodic Table of the Elements;

the substituents X, equal to or different from each other, are monoanionic sigma ligands selected from the group consisting of hydrogen, halogen, R^6, OR^6, $OCOR^6$, SR^6, NR^6_2 and PR^6_2, wherein R^6 is a linear or branched, saturated or unsaturated C_1-C_{20} alkyl, C_3-C_{20} cycloalkyl, C_6-C_{20} aryl, C_7-C_{20} alkylaryl or C_7-C_{20} arylalkyl group, optionally containing ~~one or more~~at least one Si ~~or~~and Ge ~~atoms~~atom;

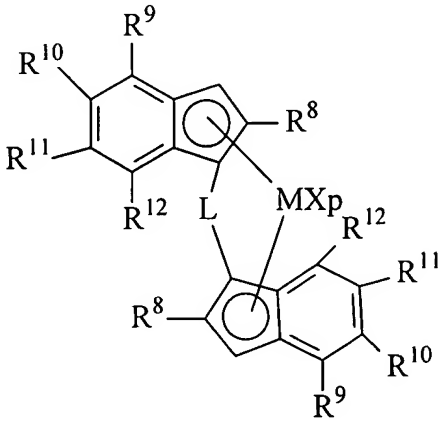
p is an integer equal to the oxidation state of the metal M minus 2;

L is a divalent bridging group selected from C_1-C_{20} alkylidene, C_3-C_{20} cycloalkylidene, C_6-C_{20} arylidene, C_7-C_{20} alkylarylidene, or C_7-C_{20} arylalkylidene

radicals optionally containing heteroatoms belonging to groups 13-17 of the Periodic Table of the Elements, and silylidene radical containing up to 5 silicon atoms;

R^1, R^2, R^3 and R^4, equal to or different from each other, are hydrogen atoms, or linear or branched, saturated or unsaturated C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radicals, optionally containing ~~one or more heteroatoms~~at least one heteroatom belonging to groups 13-17 of the Periodic Table of the Elements; or two adjacent R^1, R^2, R^3 and R^4 form ~~one or more~~at least one 3-7 membered ring ~~optional~~optionally containing heteroatoms belonging to groups 13-17 of the periodic table; said rings can be substituted by ~~one or more~~at least one hydrocarbon ~~radicals~~radical containing from 1 to 20 carbon atoms ring optionally containing heteroatoms belonging to groups 13-17 of the periodic table.

11. (currently amended) The process according to claim 10 wherein the metallocene compounds belong to formula (II):



(II)

wherein ~~M, X, L and p have the meaning as in claim 7;~~

R^8, equal to or different from each other, are linear or branched, saturated or unsaturated C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radicals, optionally containing ~~one or more heteroatoms~~at least one heteroatom belonging to groups 13-17 of the Periodic Table of the Elements;

R^9, R^{10}, R^{11} and R^{12}, equal to or different from each other, are hydrogen atoms, linear or branched, saturated or unsaturated C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl,

C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radicals, optionally containing ~~one or more heteroatoms~~at least one heteroatom belonging to groups 13-17 of the Periodic Table of the Elements; or they can join to form a condensed 4-7 membered ring.

12. (currently amended) A propylene polymer optionally containing up to 10% by mol of derived units of ~~one or more alpha-olefins~~at least one alpha-olefin of formula CH_2=CHZ wherein Z is H or a C_2-C_{10} alkyl radical having the following features:

[[-]](i) a melting point >100°C;

[[-]](ii) a total porosity expressed as percentage of voids %V/V_1 >15; and

[[-]](iii) a molecular weight distribution Mw/Mn<4.